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## The Future of Higher Education in India From Massification to Universalisation

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### The Future of Higher Education in India From Massification to Universalisation\*

N. V. Varghese\* Nidhi S. Sabharwal\*\*

#### **Abstract**

When universities were established in India in 1857, their main function remained academic administration such as granting of affiliation to colleges, conduct examinations and award degrees. Although universities became teaching and research institutions in the twentieth century, they remained slow growing institutions catering to the elite sections of society. The gross enrolment ratios (GER) continued to remain low in the past century. The growth rate of the sector accelerated, the GER progressed fast, and the country moved to a stage of massification of higher education in the previous decade of this century. The massification of higher education in India relied on market friendly reforms, non-state funding and is a reflection of the increasing social demand emanating from an expanding middle class. At present the private sector accounts for a major share in higher education institutions and student enrolment. The National Education Policy (NEP, 2020) envisages further expansion and universalisation of higher education in India by 2035.

This paper traces some of the important features of development of higher education in India and argues that the future directions of change may lie in adopting flexible pathways for higher learning, institutional restructuring and consolidation, aligning the teaching learning process with technological developments, new ways of assuring quality and new modes of governance of the sector. The success of these initiatives will depend upon how the sector negotiates with the state and market to face the challenges of equity and inclusion, and quality in a massifying, if not, universalising the system.

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#### Introduction

Universities are medieval institutions that focus on teaching and that too students who are mostly men from affluent families. Research is mostly a German contribution to the functions of universities (Ostlingst, 2018). Ever since research became a mandated function of universities, they have been relied on for generation and transmission of knowledge. The post-war reconstruction phase in Europe and post-liberation stage in developing countries relied on higher education (HE) graduates for designing development and providing professional support for national development efforts. In most of the newly independent countries, higher education remained a source of self-reliant national development to replace expatriates on the one hand and to promote public sector led development strategies on the other. The political interest and public support for higher education were forthcoming during this period. Consequently, public funding and state control of higher education became a common practice in most countries of the world.

The emergence of knowledge economy increased the premium for higher education, and it encouraged countries to invest more in higher education. The public allocations and willingness of households to invest contributed to increasing the social demand for higher education, resulting in a fast expansion of the sector in this century. The share of the gross domestic product (GDP) allocated to higher education increased in most of the OECD countries from the mid-1990 onward (Marginson, 2009). The social demand for higher education, very often, surpassed the fiscal capacity of the state to finance the sector. The market friendly reforms in the form of privatisation of public institutions and fast growth of private institutions fuelled a further expansion of the sector. The massification of the sector in many countries is currently driven by private institutions and non-state funding. Interestingly, markets were relied to massify higher education in the less developed market economies and public institutions were relied on to massify and eventually universalise higher education in the developed market economies (Varghese, 2013). The argument for considering higher education as a right has introduced a moral compulsion to extend higher education provisions to all those with capacity to pursue higher learning.

The technology has reconfigured the landscape of higher education into 'click-and-brick' institutions (Levine and Sun, 2002). Universities that resist these changes will remain as "institutions at odds with the world in which they operate" (Weller, 2009). The World Higher Education Conference (WHEC) 2022 sees higher education as essential to changing the course and shaping more just, inclusive and sustainable futures. The changes in higher education in the future will be driven by two trends:

(a) the increased freedom of learners to access education; and (b) the opportunity for learners to interact with each other outside of a mediating agent – teachers and classrooms. The higher education developments in India too followed a pattern similar to these global trends in the sector.

This paper analyses the trends in the development of higher education in India. It shows that the higher education development in the recent decades has moved away from its initial framework of public funding and state control to market friendly reforms and non-state funding. This transition helped transform higher education from a slow growing low enrolment sector to a fast growing massified sector with diversification of institutions, study programmes, sources of funding and student body.

The National Education Policy of 2020 (NEP, 2020) targets further accelerated of growth of the sector in order to reach a stage of universalisation by the year 2035. Managing quality and equity in a market mediated massifying system will remain a major challenge in the development of higher education in India in the coming years. The Covid pandemic has dramatically changed the landscape of higher education across countries and in India. The transition from offline to online learning was not easy. India is yet to fully recover from the disruptions erupted by the pandemic. While the learning process has been a challenge during the pandemic, compensating for the learning losses has emerged as a bigger challenge.

The plan of the chapter is as follows. The next section discusses the stages of evolution of the sector from a slow growing to a fast-expanding sector to reach a stage of massification. Section 3 shows the role of private institutions in massifying the higher education in India. Section 4 analyses issues related to equity and inclusion in a market mediated massification. Section 5 deals with challenges of assuring quality in an expanding system followed by a discussion on governance and management of higher education in India in Section 6. Section 7 discusses the issues related to financing of an expanding higher education sector in India and Section 8 includes a discussion on internationalisation of HE in India. Section 9 focusses on the new directions of the NEP 2020 and the final section draws some conclusions from the analysis made in the paper.

#### Massive Expansion and Massification of Higher Education

According to Martin Trow's classification of stages of development of higher education (Trow, 2006), India with a GER of 27.1 per cent in 2019-20 is in a stage of massification. With around 38.5 million students, 1.5 million teachers and more than

forty thousand institutions in 2019-20 (MOE, 2020), India surpassed the USA to become the second largest higher education sector in the world. In the first fifty years of planned development (between 1951 and 2001), when public universities were the major institutional arrangement for pursuing higher studies, the growth of the sector was slow and the gross enrolment ratios (GER) were low. The country could achieve an enrolment level of 8.8 million and a GER of 8.4 per cent in the first 50 years (1951-2001) of planned development (Table 1).

The expansion of the sector accelerated from the turn of this century. The enrolment increased from 8.8 million in 2001-02 to 38.5 million in 2019-20. The first decade of the present century experienced an annual addition of nearly 2.0 million students making it the largest expansion ever experienced by the sector in any decade. The annual additions in enrolment, although declined, still continues to be high at around 1.1 million students during the period from 2011-12 to 2019-20 (Table 1). The National Education Policy (NEP, 2020) has set the target of a GER of 50 per cent by 2035. The fast expansion of the sector is because of the contributions made by the private institutions. At present private institutions account for a major share in the total number of institutions and in student enrolment.

The higher education development in India during the post-independence period can broadly be categorized into three stages: i) a period of expansion to support self-reliant development (1950-70); ii) a stage of declining growth and public support (1970-2000); and iii) a stage of revival and massive expansion of the sector in this century.

#### Higher Education for Self-Reliant Development (1950-1970)

Independent India accorded high priority to higher education. The first commission on education (Radhakrishna Commission) established in independent India was on higher education. The recommendations of the first commission laid the foundation for higher education development in India. Following the recommendations of the commission, India established national regulatory bodies such as the University Grants Commission (UGC) and similar other bodies to regulate and maintain the overall quality and standards in higher education. The initial priority concerns for higher education development in India seemed to be on: a) linking higher education with development; b) expanding access with equity; and c) ensuring quality.

India, like many developing countries, adopted a public-sector led strategy of development during the post-independence period. It adopted a planning framework



and formulated five-year plans to direct self-reliant economic and social development. India made serious efforts to link higher education with the country's aspirations for self-reliant development. The initial priorities of the sector focussed on economic growth relying on agriculture, industrial growth relying on technological advancement and ensuring health security and social equity. India established agricultural universities, medical colleges and specialised institutions such as Indian Institutes of Technology (IITs), Indian Institutes of Management (IIMs), Regional Engineering Colleges (RECs) to support economic development and several institutions of higher education to expand higher education with equity. As a result of these initiatives, the enrolment in higher education institutions increased ten times (from 0.2 to 2.0 million) in the first two decades of planned development in India (Table 1), although the GER remained low at 4.2 per cent.

Table 1: Higher Education Expansion in India

Year	Central Universities	State Universities	Deemed to be Universities	Institutes of National Importance	Private Universities	Total	Colleges	Enrolments (in millions)	GER (%)
1950-51	3	24	-	-	-	27	578	0.2	
1960-61	4	41	2	2	-	49	1819	0.6	1.5
1970-71	5	79	9	9	-	102	3277	2.0	4.2
1980-81	7	105	11	9	-	132	4577	2.8	4.7
1990-91	10	137	29	9	-	185	6627	4.4	5.9
2001-02	18	178	52	12	-	260	11146	8.8	8.1
2005-06	18	205	95	18	7	343	17625	11.6	11.6
2011-12	42	299	40	59	178	621*	34908	28.5	19.4
2015-16	44	342	122	75	198	799**	39071	34.6	24.5
2018-19	47	385	124	127	305	993**	39931	37.4	26.3
2019-20	49	400	126	135	328	1043**	42343	38.5	27.1

Source: Varghese (2015); MOE (2020)

<sup>\*</sup> This figure includes others category.

<sup>\*\*</sup> This figure includes others category and Institute under State Legislature Act.

#### A Stage of Declining Growth and Public Support (1970-2000)

The decades of the 1970s and 1980s experienced declining rates of growth of institutions and enrolment in higher education. While many private institutions became public in the 1950s, private aided and private colleges (the recurring expenditure mostly met by the government) increased in number in the 1970s. "Private colleges that were legally private but publicly financed dominated the higher education landscape until 1980' (Agarwal, 2009: 72). From the 1980s onward, cost recovery measures were introduced in many public institutions, and private self-financing colleges in professional and technical subject areas came into existence. In other words, privatisation of public institutions and promotion of private institutions became common feature of higher education development in India (Varghese, 2013). The private self-financing institutions popularly known as 'capitation fee' colleges (Tilak, 1994) became popular and high in demand in the areas of technical and professional education in the 1990s.

The Committees appointed by the UGC in the 1990s (the Punnayya Committee of 1992-93) and AICTE (Dr. Swaminathan Panel, 1992) recommended privatisation of public institutions through reduced subsidies and increased cost-recovery from students. The Birla-Ambani Committee (2000) went one step further when it recommended establishment of private universities and full cost recovery from students.

#### Revival and Massification of Higher Education

The next stage in the development of higher education is marked by a revival and fast expansion of the sector. A revival of the system implied an increase in the number of institutions, student numbers, and resource availability in the sector. Between the years of 2001 and 2020, the number of universities increased over 400 per cent or more than four times (mostly private universities), colleges increased nearly four times, enrolment over four times and GER by more than three times (Table 1). This massive expansion helped India enter a stage of massification of higher education (Varghese, 2015).

The massification of the sector is also because of the growth in private universities. India has been making efforts to permit opening and operation of private universities in the 1990s. Since a bill on private universities could not be passed in the national parliament, many state governments legislated to establish private universities in the 2000s. Private universities were established in many states, and they proliferated in numbers. Between 2002 and 2020, around 328 private universities

were established in India (Table 1). The open learning systems — open universities, distance learning in traditional universities and the Indian MOOCs platforms — also helped massifying higher education in India. They account for around 11 per cent of the total enrolment in higher education (MOE, 2020).

Higher education in India is mainly undergraduate education, leading to the first university degree (Bachelor's). Although its share in total enrolment declined marginally, from 89 per cent in 2005 to 79.5 per cent in 2020, it continues to be the dominant segment of higher education in India. There was a corresponding increase in enrolments in Diploma programmes during the same period (Table 2). The major shift in demand for higher education seems to have taken place at the undergraduate level from choosing degree courses to diploma programmes. This change in the choice of course reflects the changing orientation of the diverse group of students entering institutions of higher education in a stage of massification in India.

The enrolment in Master's courses is low at 11.1 per cent (Table 2). The enrolment in research programmes (doctoral studies) is not only low but also declined from 0.66 per cent in 2005 to 0.58 per cent in 2020. The low enrolment in post graduate programmes acts as a severe constraint on the system to produce qualified teachers for higher education sector and knowledge producers for the economy. More number of teachers are required when the system moves from a stage of massification to a stage of universalisation as envisaged in the new policy on education. Similarly, to provide a strong human capital base for the expansion of the knowledge economy and for improving the national competitiveness in a globalised economy, the country needs to expand its intake in graduate and research study programmes.

There has been a faster growth of enrolment in professional courses such as engineering, medical, management, law and other vocational courses from the 1980s. This, at times, led to 'disciplinary distortions' (Anandakrishnan, 2010) --- primarily due to the increasing share of private institutions which majorly offer employment oriented technical and professional courses. Some of these courses are significantly more expensive than general courses, sometimes up to ten times more expensive (British Council, 2014). However, parents are willing to invest in such courses because of the expected high employability of such graduates and their higher salary expectations. The most recent trend is that of lack of social demand for these courses (engineering, medical, etc, as indicated above) in the private institutions. Since employment opportunities for the graduates have declined considerably.

Stage 2005 2020 Under- Graduate 89.0 79.5 Post-Graduate 9.2 11.1 Research 0.6 0.58 Diploma/ Certificate 1.0 7.3 Others 0.2 1.3 **Grand Total** 38.5m 10.0 m

Table 2: Stage-wise Enrolment of Students (%)

Source: MHRD (2005); MOE (2020)

#### Markets and Massification of Higher Education in India

While public universities were the most common institutional framework to provide higher education till the 1980s, market influence became common thereafter. The public universities became entrepreneurial (Clarke, 1998) with diversified sources of funding in the developed countries while private higher education institutions became common in the developing countries. India too moved from a public sectorled growth to a market mediated private sector dominated sector of higher education.

The evolution of the private sector in higher education in India gives an interesting story (Varghese, 2013). Immediately after independence, the private institutions were made public funded institutions. During the 1970s, public funded private higher education institutions were established through the grants-in-aid system. During the 1980s, the non-state funded self-financing private institutions, most commonly called 'capitation fee colleges' emerged (Tilak, 1994). The capitation fee colleges were mostly for-profit private institutions and offering courses in the subject areas of engineering, medicine, and management (Agarwal, 2007) and they proliferated especially in the southern states of India. These colleges were mostly teaching institutions affiliated to public universities and their degrees were awarded by the parent universities.

The private capitation fee colleges were subjected to several court cases in the 1990s. Their differential fee policies were challenged in the Karnataka court (Mohini Jain versus the state of Karnataka case in 1992). In fact, the Supreme Court banned the capitation fee in its 1992 ruling which said that the capitation fee colleges "are poisonous weeds in the fields of education and are financial adventurers without

morals and scruples and characterized them as pirates in high seas of education" (Gupta, 2008: 250). No doubt, the reckless growth of self-financing private colleges has resulted in establishing institutions with poor infrastructure, less qualified faculty members, and they provide poor quality higher education.

The next stage was the emergence of deemed-to-be-universities in the private sector in India in the 1990s. The deemed universities were authorised to offer courses and award degrees, and the private sector saw this as a safety valve to free them from academic supervision and controls by the public universities. The Ambani-Birla Report of 2000 (Gol, 2000) recommended for the establishment of private universities in India. Although the federal parliament could not legislate on the private universities Act, many of the state legislatures passed the Act and private universities became a new feature of development in higher education. The UGC brought out regulations on the Establishment of and Maintenance of Standards in Private Universities in 2003 (UGC, 2003). Following UGC regulations and policy support, the private universities proliferated in India as shown in Table 1.

Some of the private universities offer high quality education and are identified as Institutions of Eminence (IoE). However, a majority of the private universities have been offering poor quality education and the court intervened to close down some of them. For example, the Supreme Court in 2005, in one of the cases (Yashpal Sharma and others vs. the State of Chhattisgarh), ruled that all private universities established by the Chhattisgarh state as null and void leading to closure of 117 private universities. Another trend emerging recently is the closing down of many private technical and professional colleges due to declining enrolment, questionable quality of education imparted and high cost of pursuing education.

The more recent trend is that the market process which promoted fast expansion of private initiatives in higher education itself has become the biggest enemy of continued expansion of the sector. Many private institutions, especially in the professional and technical domains, are facing low enrolment and many of them are getting closed down since their graduates find it difficult to get meaningful employment. This trend is valid more in case of engineering colleges and management institutions.

#### **Massification and Disparities in Higher Education Development**

How did massification affect equity and quality of higher education in India? It is believed, in general, that the fairness and inclusion in access are the basis for ensuring equality of opportunity (Marginson, 2011) in any democratic framework. The universities and colleges are an essential part of the infrastructure of democracy. The polls between 2015 and 2018 indicate a declining public confidence and support in colleges and universities in the USA (Peterson, 2020). The empirical evidence on access to higher education shows that when the value of the indicator of inequality is increasing in an expanding system, the privileged benefits; when it is stable the privileged and the less-privileged benefits equally and when it is declining the poor benefits (Shavit and Gamoran, 2007).

India made serious efforts to ensure social justice in all sectors including education. The initial step to formulate equity policies was to set criteria to identify the disadvantaged to develop targeted programmes. The Constitution of India recognized the scheduled castes (SC) and the scheduled tribes (ST) as the two most backward groups in 1951 and guaranteed 15 per cent reservation in admissions to higher education and in employment for the SCs and 7.5 per cent for the STs. In 1987 an additional quota of 27 per cent was extended to other backward classes (OBC) in jobs and in higher education institutions. The Constitutional Amendment Act 2019 extended a quota of 10 per cent to the economically weaker sections (EWS) within the general category.

Taken together, the reservation or the quota of seats cover nearly 59.5 per cent of the admissions in institutions of higher education in India. It needs to be added that some of the state governments follow quota systems in admissions to higher education institutions which exceeds this level. In addition, the disadvantaged groups, especially the SCs and STs, are given hostel facilities in the universities. Some of the universities and colleges have separate hostels for the disadvantaged. Since the STs live in remote rural areas, the Central Government established tribal universities in some of the states to promote their education.

Did these initiatives lead to develop an equitable and inclusive higher education in India? This may be analysed in terms of disparities in terms of regions, social groups, gender, economic categories and language groups.

#### **Regional Disparities**

The regional inequalities in the distribution of higher education facilities and enrolment have widened in the recent past. In 2019-20 the number of colleges per 100 thousand population varied from 7 in Bihar and 8 in Jharkhand to 59 in some of the states such as Karnataka and 53 in Telangana (Table 3). The states with larger shares of private institutions experienced higher concentration of higher education institutions. Table 3a show that the states which have a high share of private unaided colleges also have a greater number of colleges per 100 thousand population. The gross enrolment ratio is higher in those states which have a high concentration of unaided institutions as indicated in Table 3a and 3b. The study by Varghese et al (2018) also found a high degree of correlation between the share of private institutions and enrolment in higher education. The regional concentration of institutions has also resulted in the widening of regional disparities in enrolment (Varghese, 2019). For example, between 2001-02 and 2019-2020, the GER increased over three times in some states, two times in others, and too low in other states. The states with high concentration of institutions and private universities experienced faster growth and expansion of higher education.

Table 3: Number of Colleges per 100,000 Population (18-33 Years)

SI.	SI.		Colleges	Colleges per 100 thousand population		
No.	State/UTs	2018-19	2019-20	2018-19	2019-20	
	Andaman and Nicobar	0		-	-	
1	Islands	8	8	16	16	
2	Andhra Pradesh	2678	2750	49	51	
3	Arunachal Pradesh	37	39	23	25	
4	Assam	544	558	15	15	
5	Bihar	840	874	7	7	
6	Chandigrah	25	25	13	12	
7	Chhattisgarh	760	810	24	26	
8	Dadra & Nagar Haveli	8	8	12	12	
9	Daman & Diu	10	10	16	15	
10	Delhi	180	179	8	8	
11	Goa	57	58	31	31	
12	Gujarat	2232	2275	31	31	
13	Haryana	1038	1087	33	34	
14	Himachal Pradesh	336	344	47	49	
15	Jammu & Kashmir	293	316	23	26	
16	Jharkhand	313	323	8	8	
17	Karnataka	3670	4047	53	59	
18	Kerala	1348	1417	45	48	
19	Ladakh		5		14	
20	Lakshadweep	0		0		
21	Madhya Pradesh	2191	2411	24	27	
22	Maharashtra	4340	4494	33	34	
23	Manipur	92	102	28	31	
24	Meghalaya	63	67	19	20	
25	Mizoram	32	35	25	28	
26	Nagaland	67	67	28	28	
27	Odisha	1062	1087	23	24	
28	Puducherry	76	79	46	46	
29	Punjab	1063	1079	34	35	
30	Rajasthan	3156	3380	35	37	
31	Sikkim	19	22	25	29	
32	Tamil Nadu	2466	2610	35	38	
33	Telangana	1988	2071	50	53	
34	Tripura	52	53	12	12	
35	Uttar Pradesh	7078	7788	28	31	
36	Uttarakhand	438	454	37	38	
37	West Bengal	1371	1411	13	13	
	All India	39931	42343	28	30	

Source: MHRD (2019); MOE (2020)



Table 3a: Regional Disparities and its Association with Private Unaided Institutions: 2019-2020

SI. No.	State/ UTS	Colleges per 100 thousand Population	Gross Enrolment Ratio	Private Unaided Colleges (%)
1	Andaman and Nicobar Islands	16	20	0
2	Andhra Pradesh	51	35.2	81.05
3	Arunachal Pradesh	25	35.4	34.21
4	Assam	15	17.3	12.38
5	Bihar	7	14.5	28.39
6	Chandigarh	12	52.1	8
7	Chhattisgarh	26	18.5	43.74
8	Dadra and Nagar Haveli	12	9.4	62.5
9	Daman and Diu	15	6.1	30
10	Delhi	8	48	36.21
11	Goa	31	28.4	18.97
12	Gujarat	31	21.3	63.86
13	Haryana	34	29.3	65.09
14	Himachal Pradesh	49	40.8	50.87
15	Jammu and Kashmir	26	32.4	40.26
16	Jharkhand	8	20.9	42.59
17	Karnataka	59	32	70.33
18	Kerala	48	38.8	63.98
19	Ladakh	14	7.9	0
20	Lakshadweep		7.5	NA
21	Madhya Pradesh	27	24.2	57.97
22	Maharashtra	34	32.3	62.33
23	Manipur	31	38.3	28.71
24	Meghalaya	20	26.1	28.07
25	Mizoram	28	26.1	8.57
26	Nagaland	28	18.5	18.18
27	Odisha	24	21.7	26.18
28	Puducherry	46	46.3	62.32
29	Punjab	35	28.2	63.22
30	Rajasthan	37	24.1	71.07
31	Sikkim	29	75.8	26.32
32	Tamil Nadu	38	51.4	76.69
33	Telangana	53	35.6	80.02
34	Tripura	12	20.2	13.21
35	Uttar Pradesh	31	25.3	78.46
36	Uttarakhand	38	41.5	48.51
37	West Bengal	13	19.9	48.4
	All India	30	27.1	65.21

Source: MOE (2020)



Table 3b: Regional Disparities and its Association with Private Unaided Institutions: 2019-2020

States	Colleges per 100 thousand population	Private Unaided Colleges (%)	Gross Enrolment Ratio
Karnataka	59	70.33	32
Telangana	53	80.02	35.6
Andhra Pradesh	51	81.05	35.2
Kerala	48	63.98	38.8
Tamil Nadu	38	76.69	51.4
Bihar	7	28.39	14.5
Jharkhand	8	42.59	20.9
Tripura	12	13.21	20.2
West Bengal	13	48.4	19.9
All India	30	65.21	27.1

Source: MOE (2020)

An analysis will reveal that the market process has contributed to the widening of the regional disparities in the distribution of higher education institutions and enrolment in India. It seems the market process of expansions of higher education promotes regional concentration of institutions and thus conflicts with the equity considerations across regions. The private sector establishes institutions mostly in the urban, sub-urban and semi-urban areas which can attract a larger number of feepaying students, thus leading to increasing rural-urban divide (Varghese, 2015).

Indeed, empirical evidence indicates that the same process has widened the rural-urban disparities in recent years (Figure 1). The direction and slope of the GER lines in Figure 1 shows that while there is an upward trend and an improvement in the GER in rural areas, between 2014 and 2017, the GER in rural areas grew slower than that in urban areas. The annual rate of growth in the GER in rural areas was lower at 0.8 per cent as compared to urban areas (1.14 per cent) between 2014-2017 indicating a trend of widening of rural-urban disparities.

Gross Enrollment Ratio by Location of Residence (Rural-Urban): All India 40 35 30 25 22.8 20 18.3 15 10 5 0 2007 2014 2017 Years Rural — Urban — Total

Figure 1: GER by Location of Residence (Rural & Urban): All India

Source: NSSO (2007); NSSO (2014); NSO (2017)

It is interesting to note that the market process widens regional disparities despite public policies to reduce regional inequalities by establishing new public institutions in the rural areas. Since distance becomes a barrier faced by students from the disadvantaged socio-economic groups, an urban bias in location of private HEIs, which most often offer professional courses contributes to polarisation, of HE access and re-enforcing its elite nature (Varghese, 2015).

#### **Social Group Disparities**

While massification benefited all social groups, the social inequalities in access to higher education continue to persist. Some of the disadvantaged still remain far behind others. In 2019-20 the GER at all-India level was 27.1 per cent while that for SC was 23.4 per cent and that for ST was 18. per cent (Table 4). Although the disparities in enrolment continue, there are signs of catch-up by the SC and ST groups and a faster growth in enrolment of the OBC categories, at times at the cost of general category students. For example, Table 5 shows that the OBCs increased their share in enrolment from 32.9 per cent in 2014-15 to 37 per cent in 2019-2020 and the share of students from the non-SC/ST/OBC group the enrolment decreased from 48.8 per cent to 42.7 per cent. It seems that the single group that benefitted the highest from massification of higher education in India is the OBC category (Varghese, 2019).

Table 4: Gross Enrolment Ratios (GER) in Higher Education in India

Year	ALL				SC			ST		
rear	Both	Male	Female	Both	Male	Female	Both	Male	Female	
1	2	3	4	5	6	7	8	9	10	
2011-12	20.8	22.1	19.4	14.9	15.8	13.9	11.0	12.4	9.7	
2012-13	21.5	22.7	20.1	16.0	16.9	15.0	11.1	12.4	9.8	
2013-14	23.0	23.9	22.0	17.1	17.7	16.4	11.3	12.5	10.2	
2014-15	24.3	25.3	23.2	19.1	20.0	18.2	13.7	15.2	12.3	
2015-16	24.5	25.4	23.5	19.9	20.8	19.0	14.2	15.6	12.9	
2016-17	25.2	26.0	24.5	21.1	21.8	20.2	15.4	16.7	14.2	
2017-18	25.8	26.3	25.4	21.8	22.2	21.4	15.9	17.0	14.9	
2018-19	26.3	26.3	26.4	23.0	22.7	23.3	17.2	17.9	16.5	
2019-20	27.1	26.9	27.3	23.4	22.8	24.1	18	18.2	17.7	

Source: Various years of AISHE, MHRD data sets; MOE (2020)

Table 5: Share in Enrolment Across Social Groups (%)

Years	All Category	SC	ST	ОВС	Non-SC/ST/OBC
2019-2020	100	14.68	5.59	36.98	42.75
2018-19	100	14.89	5.53	36.34	43.24
2017-18	100	14.41	5.22	35.02	45-34
2016-17	100	14.26	5.19	34.45	46.11
2015-16	100	13.91	4.93	33.75	47.41
2014-15	100	13.47	4.80	32.90	48.84
2013-14	100	13.11	4.60	32.36	49.94
2012-13	100	12.76	4.38	31.23	51.63
2011-12	100	12.24	4.49	30.06	53.21
2010-11	100	11.07	4.39	27.57	56.96

Source: AISHE, MHRD (Various Years); MOE (2020)

Trend in the growth of the GERs across social groups from 2007 to 2017: All India

35
30
25
20
15
10
5
0
2007
2017
Years

ST SC OBC OBC Others Total

Figure 2: Trend in the Growth of the GER across Social Groups

Source: NSSO (2007); NSO (2017)

Table 6: Growth Rates in GER across Social Groups (2007-2017): All India

Social Groups	GER: 2007	GER: 2017	GER: Annual Growth Rate (2007-2017)
ST	5.29	14.4	10.53
SC	8.45	17.8	7.73
OBC	10.81	22.9	7.80
Others	19.52	30	4.39
Total	12.51	22.8	6.19

Source: NSSO (2007); NSO (2017)

Table 7: GER Across Social Groups and Location of Residence (2007, 2017): All India

Social Groups GER	Rural		Urban		Total	
	2007	2017	2007	2017	2007	2017
ST	3.53	12.14	19.07	28.99	5.29	14.35
SC	6.12	15.82	15.93	24.83	8.45	17.84
OBC	7.96	19.20	19.01	31.51	10.81	22.93
Others	12.49	22.81	28.87	39.90	19.52	29.95
Total	8.21	18.32	22.83	33.35	12.5	22.81

Source: NSSO (2007); NSO (2017)

The disadvantaged groups are progressing at a faster speed in their HE enrolment than that among the non-SC/ST/OBC categories (others), as we see from Figure 2 and also from Table 6. For example, the gross enrolment ratio for the disadvantaged social group such as the scheduled tribes and the scheduled castes grew at a rate of almost 11 per cent per annum and about 8 per cent per annum, between the years 2007 and 2017, respectively (Table 6). The progress of the disadvantaged social groups was greater than non-SC/ST/ OBC group which experienced an annual growth rate of 4 per cent in its GER between the same period. This evidence gives scope for optimism about narrowing down the GER differences in the future.

Tables 5 and 7 taken together reveal an interesting trend in higher education development in India. It can be argued that massification implies marginalising the undue advantage enjoyed by the privileged groups in India. The higher rates of growth of enrolment among the disadvantaged groups than among the non-disadvantaged groups have resulted in narrowing down of the disparities in enrolment among social groups. The faster growth in enrolment among the disadvantaged groups has facilitated the catch-up process moving towards a situation of convergence than divergence. This phenomenon may be seemingly conflicting because convergence takes place when diversity is widening. In other words, increasing diversity is accompanied by positive trends towards convergence.

It is important to note that the efforts for improving the GER would need to target the disadvantaged groups, especially from the scheduled tribes residing in rural areas. The data in Table 7 indicate that in rural areas vis-à-vis the urban areas, the GER gap was wider between the privileged groups and disadvantaged groups, such as the STs. For instance, in 2017 the GER of the higher caste groups was almost two times that of ST group in rural areas. In urban areas the GER of the privileged groups, the non-SC/ST/OBC (others) was 1.3 times that of the ST group. One of the constraints is that the disparities in the higher education sector are extensions of those at the school education sector.

Furthermore, as noted before, as a result of the higher education institutions being more concentrated in urban areas, distance becomes an economic burden and acts as a barrier for student residing in rural areas to access higher education opportunities. Therefore, unless school enrolments are universalised and HEIs are more spatially equally distributed even a high transition rate from secondary to higher education may not increase GER in higher education. The empirical analysis shows evidence of catch-up in enrolment by different social groups. The growth rate in enrolment of the disadvantaged groups, in general, is higher that than among the

general categories. More importantly, the OBCs are growing faster and are increasing their share in total enrolment.

#### **Gender Disparities**

The gender inequalities are narrowing down in higher education in India. One of the unique features of higher education is that unlike school education, gender parity is achieved at lower levels of GER in higher education than in school education. In most of the developed countries the GER of females surpasses that of males. India has not yet reached that stage, although in some of the states the female GER is more than that of the males. Table 8 shows that the variations in GER between sexes are the lowest among the students from the privileged ('other') category. In 2017-18 the GER of the other category women was almost 164 per cent higher than that of ST women (or 2.64 times that of ST women), and 81 per cent higher than the GER of SC women (Table 8).

Table 8: Gross Enrolment Ratio by Social Groups, Location of Residence and Gender: All India, 2017

GER	Rural			Urban			Total		
GEN	Male	Female	Total	Male	Female	Total	Male	Female	Total
ST	15.6	8.4	12.1	30.7	27.4	29.0	17.5	11.0	14.4
SC	17.8	13.6	15.8	25.2	24.4	24.8	19.5	16.0	17.8
OBC	21.9	16.1	19.2	33.3	29.6	31.5	25.3	20.4	22.9
Others	24.5	20.9	22.8	39.3	40.5	39.9	30.8	29.0	30.0
Total	20.7	15.6	18.3	34.1	32.5	33.4	24.70	20.7	22.8

Source: NSO (2017)

The gender parity index (GPI) at the national level is 1.01 in 2019-20. Although traditionally women have been lagging behind men in terms of enrolment in higher education among all social groups, this trend has changed. For example, the GPI is 1.01among all the caste groups while it is 1.05 in case of SC groups and 0.97 among ST groups (Table 9). These changes are due to the faster progress in enrolment of the girls than boys as can be seen from Table 9.

Table 9: Gender Parity Index in Higher Education: India

Year	ALL	SC	ST
2011-12	0.88	0.88	0.78
2012-13	0.89	0.89	0.79
2013-14	0.92	0.92	0.81
2014-15	0.92	0.91	0.81
2015-16	0.92	0.91	0.83
2016-17	0.94	0.93	0.85
2017-18	0.97	0.96	0.87
2018-19	1.0	1.02	0.92
2019-20	1.01	1.05	0.97

Source: MHRD (2019); MOE (2020)

However, the interaction of gender with location worsens the disparities in access to higher education opportunities. The latest available NSS data set for 2017 show that gender gap in access to higher education in rural areas is wider vis-à-vis in urban areas. For instance, in 2017-18 the gender parity index in urban areas is 0.95 vis-à-vis 0.75 in rural areas. This suggests that women residing in urban areas tend to have a better access to higher education opportunities as compared to women residing in rural areas. Further, amongst the privileged social groups in urban areas, which have a GER of 40 per cent, there is gender disparity in higher education access at the expense of male students (GPI = 1.03). Gender related social expectations of benefits and motivation to gain higher levels of education can be linked with gender variations in educational trajectories. It is argued that for young women, higher levels of education are seen as improving their matrimonial prospects and lowering of dowry demands which in turn results in lower costs on organisations of marriages incurred by parents (Kumar and Gupta, 2008). In contrast, for young men, social expectations are geared towards contributing to the families' sources of income and gaining employment, thereby resulting in gender variations in levels of access to higher education (Sudarshan, 2018).

Table 10: Women Enrolment by Disciplines at the Undergraduate Level in 2020

Dissistin a	Total	Female %	
Discipline	In millions		
Arts	9.66	52.9	
Science	4.76	51.72	
Commerce	4.16	48.78	
Engineering and Technology	3.73	29.22	
Medical Science	1.35	59.51	

Source: MOE (2020)

Table 10a: Subjects being Studied by Gender, 2007 and 2017 (%): All India

Subjects being Studied	20	007	2017	
	Male	Female	Male	Female
Humanities	55.73	44.27	53.00	47.00
Science	63.49	36.51	61.50	38.50
Commerce	58.58	41.42	58.60	41.40
Medicine	32.97	67.03	40.20	59.80
Engineering	76.74	23.26	73.50	26.50
Agriculture	79.96	20.04	70.70	29.30
Law	49.64	50.36	63.90	36.10
Management	66.28	33.72	54.40	45.60
Education	52.49	47.51	40.40	59.60
Chartered accountancy and similar courses	67.50	32.50	61.70	38.30
IT/computer courses	56.14	43.86	63.30	36.70
Technical/professional from recognised vocational training institutes	66.26	33.74	85.50	14.50
technical/professional: others	51.32	48.68	52.50	47.50
Total	55.75	44.25	56.20	43.80

Source: NSSO (2007); NSO (2017)

The gender parity has another dimension if one looks at the choice of courses by women. Table 10 shows that gender disparities in choice of subjects. At the undergraduate level, 53 per cent (Table 10), and in fact at all levels of studies — undergraduate, graduate and postgraduate levels — the largest share of women, that is 47 per cent (Table 10a; NSO, 2017) are enrolled in Arts and Humanities programmes (Chanana, 2012; Sabharwal and Malish, 2018). In terms of gender variations in subjects being studied, more women than men join study programmes inhumanities/social

sciences, medical sciences and education, while they are less represented in commerce and technology study areas. The share of men in Engineering courses is almost thrice that of women. These trends have remained more or less similar in the past several years as seen from Table 10a. Under-representation of women in the technology and commerce related subject areas have implications on their access to employment opportunities in technology based and professional careers.

#### **Disparities Among Economic Groups**

The economic inequalities in access to higher education have been consistently high. There seems to exist a positive association between the income levels and GER in higher education. A major share of young adults from higher income groups attends higher education institutions while the same from the low-income groups is low. In the year 2017, the GER in the poorest group (bottom 20 per cent quintile) was nearly 73 per cent less than the GER in the top quintile (12.2 per cent as compared to 44.6 per cent). Table 11 shows that young adults from wage labour households in rural areas were least likely to attend higher education amongst all occupation groups. For example, in rural areas the GER in wage labour household was 63 per cent lower than that in households where major source of income was from regular salary occupations. In other words, children belonging to families with irregular sources of income and fewer economic resources were least likely to access higher education.

Table 11: GER Across Household Types and Sector, 2017: All India

Household Type	Rural
Self-Employed -Agriculture	20.5
Self-Employed in Non-Agriculture (Agri)	20.4
Regular Salaried- Agri	18.5
Regular Salaried (Non-Agri)	30.1
Casual Wage Labour (Agri)	12.9
Casual Wage Labour (Non Agri)	11.5
Household Type	Urban
Self Employed	34.0
Regular Salary Earnings	36.3
Wage Labour	17.0

Source: NSO (2017)

This trend is consistent over time. For example, in 2007 the GER of children belonging to the poorest group in the lowest quintile (lowest 20 per cent) was around 3 per cent while that among the privileged belonging to the highest quintile

(highest 20 per cent) was 32.2 per cent. The corresponding figures for the year 2017 were 12.2 per cent and 44.6 per cent respectively. This shows that despite the fast expansion, the disparities in access have persisted among economic groups and this can be attributed to the dominance of private institutions in persistence of economic disparities in enrolment. It shows that the market process systematically excludes the poor from entry into institutions of higher education.

Amongst the income groups, women from the poorest income group are the ones who are most likely to be left behind in access to higher education. Figure 3 and Table 12 show that while gender disparities in access to higher education persist across income groups and geographical locations, the gender gap is generally larger in the poorer income groups in rural areas vis-à-vis higher income groups in urban areas. The chances of women from the richest 20 per cent income group residing in urban areas to access HE is 4.4 times that of women in the poorest 20 per cent income group residing in rural areas. In other words, these results show that poverty and geographical isolation poses as significant barriers in the way of women to access higher education opportunities.

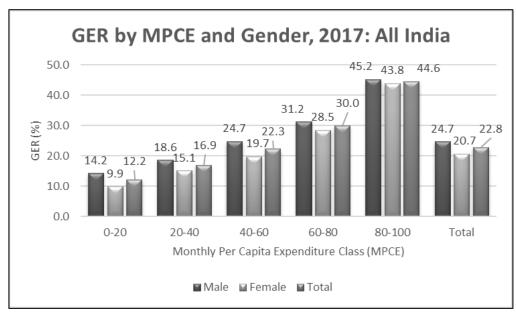


Figure 3: GER by Income Groups and Gender, 2017: All India

Source: NSO (2017)

Table 12: GER by MPCE, Location and Gender, 2017-18: All India (%)

CER	Rural			Urban			Total		
GER	M	F	Total	М	F	Total	M	F	Total
0-20	14.3	9.3	11.9	14.1	16.4	15.3	14.2	9.9	12.2
20-40	18.6	14.0	16.4	18.8	21.3	20.1	18.6	15.1	16.9
40-60	24.4	18.8	21.7	25.7	22.7	24.2	24.7	19.7	22.3
60-80	29.4	26.6	28.1	33.3	30.5	32.0	31.2	28.5	30.0
80-100	43.0	39.1	41.4	45.7	44.7	45.2	45.2	43.8	44.6
Total	20.7	15.6	18.3	34.1	32.5	33.4	24.7	20.7	22.8

Source: NSO (2017)

Notwithstanding the persistence of economic disparities, as noted above, the GER improved in the poor income group in the year 2017 vis-à-vis 2007 and the gap in the GER between the rich and the poor narrowed. The gap between the GER of the top 20 per cent and the poorest 20 per cent dropped from around 11 times to 4 times. Which means the poorest 20 per cent group is catching up in their access to higher education. These results also indicate that an expanding HE system is more equitable as compared to a system where the HE expansion is controlled. Importantly, policies targeting the rural poor in the form of establishing public higher education institutions and student support systems become a necessary condition to progress towards a more inclusive higher education in India.

#### **Medium of Instruction and Disparities**

Another source of exclusion in India is the medium of instruction. English language is seen to be the language of the elite and the most preferred language in the universities. Figure 4 shows that a majority of students from the richest income group (77 per cent) were studying in English in higher education vis-à-vis 18 per cent from the poorest income group. In other words, students from the poorest income were undertaking their HE studies in Hindi or a regional language.

Medium of Instruction in HE by Income Groups, 2017: All India 120% 100% Mol Share in HE 21% 23% 25% 80% 18% 24% 60% 33% 83% 48% 77% 40% 20% 0% 0-20 20-40 40-60 80-100 Total 60-80 Income Groups (MPCE) ■ Hindi ■ English ■ Regional

Figure 4: Share of Students in HE by Medium of Instruction and Income Groups, 2017: All India

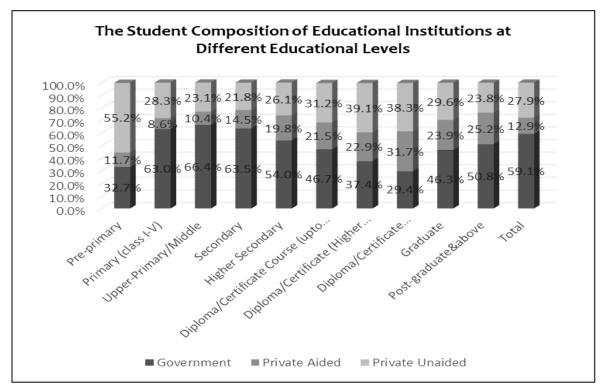
Source: NSO (2017)

According to the National Sample Survey of 2017, nearly 65 per cent of the students in unaided private schools followed English as the medium of instruction. On the contrary, the corresponding share of students studying in English in the government institutions was only 16 per cent. Private unaided schools were catering disproportionately more to students studying in English vis-à-vis government schools. These results are also mirrored in Figure 5 and Figure 6. For example, at higher secondary level, Figure 5 and Figure 6 show that while the students studying in private unaided schools comprised 20 per cent of the total numbers (attending) higher secondary (HS), 51 per cent of HS students studying in English were in private unaided schools.

At the other end of the spectrum, 54 per cent of students were studying in government schools, but less than 26 per cent of those studying in English at higher secondary level were attending government schools. More importantly, the share of students following English as a medium of instruction has increased in the private unaided sector (from 64 per cent in 2007 to 65 per cent in 2017) while it remained the same in government institutions. These students have a disproportionately high share in higher education enrolment. There seems to be an interesting pathway to higher education in India. The students from private English medium schools account for a disproportionately higher share in enrolment in the universities and elite institutions. An interesting trend seems to be that parents tend to prefer elite English medium

private institutions at the school education level and elite public institutions at the higher education level. This pattern reinforces the elite nature and exclusionary pattern of higher education development in India irrespective of the state or market provision.

Figure 5: Student Composition by Management Across Educational Levels, 2017: All India



Source: NSO (2017)

Student Composition of Educational Institutions studying English at different Educational levels 100.0% 90.0% 80.0% 59.9 70.0% 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% Diploma Certificate Intester. 0.0% Jpper Prinary Inhiddle Post-Braduate & above ■ Private Unaided ■ Government ■ Private Aided

Figure 6: Student Composition by Management Studying in English across Educational Levels, 2017: All India

Source: NSO (2017)

The Indian experience shows that the affirmative policies have helped in bringing more children belonging to the disadvantaged groups to institutions of higher education. A more formidable challenge India faces is in terms of translating these achievements to improve learning outcomes and developing inclusive campuses. Table 13 provides insights into the pattern of social disparities in progression from one year to the next across educational levels. For example, at the overall level, of the total students from the disadvantaged social groups, such as of the STs, the share of students whose present year was same as the previous year was higher (3.5 per cent) compared to that from the privileged groups (2.1 per cent). At the undergraduate level this gap between ST and Others was over three times, with STs fairing worse than the 'others'. In case of the SC-Others gap, the share of SC students whose present year was same as the previous year was 26 per cent higher than the privileged (others) social group. Existing empirical studies also points out that a relatively higher proportion of dropouts from institutions of higher education are students who belong to disadvantaged social groups (Sivasankaran and Raveendran, 2004; Sabharwal et al., 2014; Henry and Ferry, 2017).

Table 13: Present Class/Grade/Year Same as the Previous Year by Social Groups, 2017: All India (%)

Educational Levels	Currently enrolled at the Secondary Level				
Social Group	Yes	No	Not Relevant		
Scheduled Tribe	4.0	96.0		100.0	
Scheduled Caste	3.7	96.2	.1	100.0	
Other Backward Class	2.5	97.5	.0	100.0	
Others	2.4	97.6		100.0	
Total	2.9	97.1	.0	100.0	
	Curren	tly enrolle	d at the Higher Sec	ondary Level	
	Yes	No	Not Relevant		
Scheduled Tribe	3.5	96.5		100.0	
Scheduled Caste	4.6	95.4		100.0	
Other Backward Class	3.1	96.9		100.0	
Others	2.9	97.0	.1	100.0	
Total	3.4	96.6	.0	100.0	
	Currently enrolled at the Under-Graduat				
Scheduled Tribe	8.6	90.3	1.1	100.0	
Scheduled Caste	3.4	92.7	3.9	100.0	
Other Backward Class	3.4	92.9	3.7	100.0	
Others	2.5	96.9	0.7	100.0	
Total	3.4	94.0	2.6	100.0	
		All Educati	ional Levels		
Scheduled Tribe	3.5	96.5	.1	100.0	
Scheduled Caste	3.5	96.2	.4	100.0	
Other Backward Class	2.6	97.0	.4	100.0	
Others	2.1	97.8	.1	100.0	
Total	2.7	97.0	.3	100.0	

Source: NSO (2017)

Many students from the disadvantaged groups do not perform well in their studies even in elite institutions. The limited cultural capital the students bring along with them, the lack of English language proficiency and poor college preparedness are some of the factors affecting their academic integration in the classrooms and social inclusion in the campuses (Sabharwal and Malish, 2018). Academic integration means the degree for which students participate in teaching learning processes, which in turn is an outcome of social and academic experiences while they are at college. Students from the disadvantaged social groups tend to face acute academic



adjustment problems as result of multiple factors. These factors are related to overdominance of lecture methods and their prior medium of instruction which pose limits to the opportunities of participating in classroom interactions and collective learning.

Research (Borooah and Sabharwal, 2017; Sabharwal and Malish, 2018) shows that students from the disadvantaged social groups are more likely to have studied in regional languages which then becomes a barrier to HE studies which is most often in English. The medium of instruction as English in HE as well as limited availability of textbooks in English pose as substantial barriers to academic integration for students from the socially disadvantaged social groups. In addition, lack of awareness about remedial classes and underutilisation of libraries as a learning resource prevents students in bridging their academic gaps. Unfortunately, faculty members generally hold a negative outlook towards rising diversity amongst the student body. And as a result of a negative attitude, students from the disadvantaged group get lesser attention from teachers instead of receiving additional learning inputs. In the absence of supportive policies for academic integration, the disadvantaged students face high dropout rates and lower levels of academic success and poor learning outcomes. Therefore, it becomes of utmost importance that the existing academic support programmes, such as remedial classes are effectively managed and implemented (Malish and Sabharwal, 2021).

The higher education outcome in terms of employment opportunities also reflect the need for more public policy interventions. The pattern of distribution of employed by educational levels according to NSO 2019 indicate that a higher proportion of employed amongst the disadvantaged groups are illiterate (e.g., SC = 53 per cent) as compared to non-disadvantaged groups (40 per cent). Moreover, a higher share of employed amongst the disadvantaged groups (e.g., SC = 39 per cent, STs = 29 per cent, OBCs = 21 per cent) are in casual labour category as compared to others (12.2 per cent).

When we consider the employment pattern among the HE graduates, HE graduates account for 50.2 per cent of the employed among the others while the figure among the SCs is lower at 48.4 per cent. Even with graduate degrees, a higher share of SCs (8 per cent) and STs (4.2 per cent) as compared to non-disadvantaged groups (1 per cent) are employed in casual labour category. Casual labour jobs are insecure with limited guarantee of regular employment, are informal in nature with limited social protection making the group at risk of falling and remaining in the poverty trap. The graduate unemployment rate among different social groups indicate that it is highest at 22 per cent among SC followed by 20.2 per cent among ST,

19.2 per cent among the OBC and 13.5 per cent among the non-disadvantaged category. In other words, the incidence of unemployment is higher among the higher education graduates belonging to the disadvantaged groups (Varghese, 2019).

There seems to be a positive association between technical higher education and access to quality employment opportunities which are regular salaried jobs, more secure and formal in nature. In contrast, graduates without technical degrees are more likely to be self-employed which is increasingly being dominated by low-paid informal work accessed through sub-contracted arrangements.

Table 14: Graduates by Type of HE Degree and their Employment Structure (%): All India, 2017

	No Techni	cal Education	Technical Degree in Engineering		
Household Type	(Rural)	(Urban)	(Rural)	(Urban)	
Self Employed	58.0	41.2	56.0	16.4	
Regular Salary Earnings	8.7	36.7	24.6	71.0	
Wage Labour	30.0	14.8	14.0	1.0	
Others	3.8	7.4	5.8	11.6	
Total	100	100.0	100.0	100.0	

Source: NSO (2017)

For example, Table 14 shows that in the urban areas, households with members who had not undertaken any technical education such as in the field of engineering, architecture, management and pharmacy as their highest level of education at the HE level were more likely to be self-employed (41.2 per cent) as compared to being employed in regular salaried jobs (37 per cent). Likewise, in rural areas, 58 per cent of those households with members who had no technical education as their highest level of education were self-employed followed by those employed in casual labour jobs (30 per cent).

On the contrary, a majority of graduates with technical degrees such as in the field of engineering, especially in the urban areas, were employed as regular salaried workers (71 per cent), followed by self-employed (16.4 per cent) as seen in Table 14. It is now being acknowledged that graduates opting for self-employment in urban areas represents more a form of casualisation of educated labour force, rather than being an opportunity of entrepreneurship. The dimensions of casualisations of self-employed graduate workers in urban areas include being generally engaged in informal low-earning sub-contracted activities with irregular work hours, lack of social

protection and limited access to on-job training opportunities enjoyed by those employed in the formal sector (Henley, 2021).

In relation to the wage levels by education, Table 15 shows that there exists a positive association between levels of education of the employees and wage levels. Higher educated workers tend to work in higher end jobs which offer higher wage levels. In contrast, those at the lower end of educational ladder are able to access lower-end jobs with lower wages. It is evident from the Figure 7, that the wage differentials sharpest between higher secondary school graduated and tertiary education graduates.

Wage levels (Regular) by Educational Levels, 2019: All India

32996.5

35000
24523.5

7376.6

9159.7

10666.8

13268.3

15122

Post Grahafe And. · · ·

Right Secondary

Prost Grahafe And. · · ·

Right Secondary

Fight Secondary

Figure 7: Regular Wages (in Rs.) by Educational Levels: All India, 2019

Source: PLFS (2020)

#### The Challenges of Quality Assurance in a Massifying System

The fast expansion and massification has put tremendous pressure on quality of provisions and outcomes of higher education. Indian universities do not appear in the top positions in the world university rankings which is a matter of serious concern in the country. The Indian response to world ranking results was two-fold: (a) initiate efforts to establish world class universities/institutions of eminence; and (b) introduce its own national rankings. India has initiated steps to establish 20 institutions (10 private universities and 10 public universities) of eminence. The National Institutional Ranking Framework (NIRF) helped the launching of a national ranking exercise in India in 2015. The ranking results are generally published in the month of April every year. A close look at some of the trends in the results indicate that mostly the public institutions attain top positions in the NIRF rankings.

Rankings cover only limited number of institutions and therefore, they may not be relied upon for improving the overall quality of the higher education sector. Countries have been relying on external quality assurance (EQA) mechanisms to carry out accreditation and quality audit to ensure quality of higher education. The EQA can ensure a threshold level of quality across institutions and can strengthen accountability in terms of learning outcomes in higher education.

India established external quality assurance agencies in the 1990s. The National Assessment and Accreditation Council (NAAC) was set up by the UGC in 1994 to accredit universities and institutions of general higher education and the National Board of Accreditation (NBA) was established by the All India Council of Technical Education (AICTE) to accredit programmes in technical education. NAAC accredits institutions and certifies for educational quality of the institution based on seven criteria such as: (a) curricular aspects; (b) teaching–learning and evaluation; (c) research, consultancy and extension; (d) infrastructure and learning resources; (e) student support and progression; (f) organisation and management; and (g) healthy and innovative practices.

Accreditation by NAAC is voluntary and is valid for five years. The progress in accrediting institutions is very slow in India. It seems that only about one-third of the universities and about one-fifth of the colleges have been accredited in the past 25 years of existence of NAAC. Higher education institutions in India have also established internal quality assurance (IQA) cells. It seems these cells mostly collect data on various aspects related to teaching learning and prepare reports. The effectiveness of these IQA Cells in monitoring and improving quality needs to be studied systematically.

Several quality improvement initiatives are started through a new scheme called Pandit Madan Mohan Malaviya on Teachers and Teaching (PMMMTT) launched in the previous decade. Under this scheme, many universities have established Schools of Education to research on pedagogical aspects and to improve teaching learning processes and learning outcomes in higher education in India. The National Resource Centres (NRCE) under the same scheme extends teacher support through providing learning materials and research references to teachers.

India made serious efforts to enhance entry level qualifications and salary levels of teachers in higher education and introduced screening at national and state levels to ensure that only good quality scholar enter the teaching profession. The number of teaching staff with doctoral degrees has increased in India. Further, entry to the

teaching profession also requires competing and succeeding in national eligibility tests (NET) or its equivalent at the state level.

Did these efforts lead to quality improvement in higher education? The answer may not be conclusive. It seems variations among institutions in terms of basic facilities, teacher qualifications and competencies and student profiles vary widely. These variations will have their implications in learning outcomes and quality of higher education. India has a small share of high-quality institutions and a large share of low-quality higher education institutions. This is true in the public and private sector institutions. The difference is that many of the poor-quality institutions in the private sector, especially in the professional and technical domains, are closing down while similar institutions in the public sector continue to survive. The closing down of private institutions for lack of demand shows that quality has become a non-negotiable element for the survival of the market mediated higher education process in India.

#### **Governance and Management of Higher Education**

The first set of universities were established in India in 1857. There existed no regulatory bodies for decades. India established the Central advisory Board of Education (CABE) in 1921 to bring consensus among provincial governments on policy matters pertaining to education. The first regulatory body in higher education in India was, perhaps, the Medical Council of India (MCI) which was established in 1934. MCI had the authority to lay down norms and standards, recognise or derecognise courses and institutions.

When India got independence, education became a state subject as per the constitution. In 1976 education was transferred to the concurrent list making it a joint responsibility of the Central and State governments. It was felt that the sector needs regulation to ensure planned and coordinated development, quality of education, equity and social justice (quotas and other affirmative policies) and to prevent unfair practices (Ayyar, 2013). The areas which require closer examination and regulation from this point of view are: granting permission to enter (open an institution), permission to operate – decide on the intake of students and introduction of courses, monitoring its overall performance including issues related to governance and management and levels of student learning.

The first Education Commission of India (Radhakrishnan Commission 1948) recommended for the autonomy of universities. It emphasised on the legislative framework for the universities to operate and a strong governing body with external

members thus leaving the universities free from interference. Universities were supposed to be self-regulating entities, expected to voluntarily adhere to standards determined by the UGC. The recommendations of the Commission led to the establishment of bodies such as AICTE and UGC and it helped shift the regulatory authority to the central government (Carnoy and Dossani, 2011). Thus, centralised regulation became the norm. In other words, public policy, state funding and state control became the features of higher education development in India during the initial periods after independence.

The University Grants Commission (UGC) was established as a statutory body by the parliament "for coordination and determination of standards in Universities" in 1956. Unlike the MCI, the UGC does not have the authority to derecognise a university, or its degree, and it remains a recommendatory entity (Singh, 2004), although some of the committees appointed by the UGC have recommended for closure of institutions, especially deemed to be universities. Although, UGC is the main regulatory body, there exists multiplicity of regulatory bodies in higher education in India. Since higher education is organised by several Ministries, each Ministry has its own body to regulate. There are nearly 16 regulatory bodies functioning in higher education.

There have been discussions to establish a single regulatory body to ensure coordinated development of higher education. The National Policy of Education (1986) and the Plan of Action (1992) envisaged the establishment of a national apex body. The National Knowledge Commission in 2006 recommended the setting up of an Independent Regulatory Authority for Higher Education (IRAHE). The Yash Pal Committee of 2011 also recommended an apex body --- National Council for Higher Education and Research (NCHER) to regulate the higher education sector. It envisaged increased state funding for higher education, more regulation of the private sector and increased institutional autonomy. The committee was against commercialisation of education and discouraged for-profit private institutions while encouraging partnership with non-profit private organizations in higher education. It was expected that the regulatory body would guard against fast expansion of for-profit institutions providing education of questionable quality.

Another institutional arrangement that influences management of higher education at the state level is the State Higher Education Councils (SHECs) which were established following the recommendations of the National Policy on Education (NPE) of 1986. The SCHEs are expected to carry out the planning and coordination functions which include initiatives to improve the standard of higher education, to advice state

governments on various issues relating to development of higher education in the state, to monitor and release grant in aid from state governments to universities and colleges, to promote cooperation and coordination of higher education institutions among themselves, to explore the scope for interaction with industry and other related establishments to propose guidelines for establishment of new institutions and to suggest ways to augment resources to the sector.

Academic functions include the promotion of innovations and restructuring of courses, improvement of standards of examinations, promotion of programmes of academic cooperation, interactions between colleges and university departments and academic staff training. Advisory functions include determining block maintenance grants, laying down the basis for such grants, setting up of a state research board. Unfortunately, many of the SCHEs do not have regular faculty members and it constraints their capacity to effectively intervene in the planning and management of higher education at the state level.

The major issue is that of autonomy of higher education institutions. It may not be incorrect to argue that institutional autonomy in the 1950s was with guaranteed funding. Today autonomy is posed as an alternative to public funding. Many public higher education institutions are starving for funds and the resource allocations do not even meet the salary budgets of the institutions. India has also introduced a process of staggered autonomy – institutions getting high scores in accreditation are freer and those obtaining low scores are subject to more controls. One of the studies by CPRHE also indicated that the central universities enjoy better funding and autonomy, and the state universities are getting low levels of funding and higher levels of control (Malik, 2020).

#### Financing of an Expanding Higher Education Sector in India

Financing of education has traditionally been a domain of public sector investments. It is generally expected that the sector will be relying more on public funding when the country is less developed and more relying on private funding when the country is more developed (Musgrave, 1959). Most developed countries are investing a larger share of their education budgets on higher education than their less developed counterparts. The share of higher education budgets, on the other hand, declined even when education budgets increased in the developing countries (Varghese, 2021).

The criteria for allocation of public funding for higher education changed in the recent decades. Public fund allocations became guided by performance-based

allocations in the form of formula funding, performance agreements and competitive funding. Another aspect is that they became targeted funding — free tuitions or no tuitions to socially and economically disadvantaged groups. Another noteworthy trend is concentrated investment for academic excellence initiatives to support the creation of world-class universities (UNESCO, 2022).

India too moved from a reliance on state funding to non-state funding in higher education. The public institutions, public funding and state control were important characteristics of the higher education development in India in the initial decades after independence. The share of education in the GDP continued to be low in the initial decades. Following the international commitment, the national policy on education 1968 recommended for an allocation of 6 per cent of the GDP for education. The 1986 policy on education reiterated the national commitment of investing 6 per cent of the GDP on education. The Jomtien statement of 2011 reiterated the need to invest at least 6 per cent their GDP and 20 per cent of the public expenditure on education.

The expenditure on education as a share of GDP has been increasing in India from 0.64 in 1950-51 to reach a share of 4.07 per cent of the GDP and nearly 10 per cent of the public expenditure on education in the year 2016-17. The CABE Committee of 2005 recommended that at least 1.5 per cent of GDP needs to be allocated to higher education 1 per cent to university and higher education and 0.5 per cent to technical education. These allocations continue to fall short of the allocation targets both for the education sector and to the higher education sub-sector.

The budget estimates of the MHRD for 2019-20 indicated the allocation of resources between school and higher education. It is observed that nearly 60 per cent of the public expenditure on education is on school education and nearly 40 per cent for higher education sector. Nearly 20 states allocated less than 15 per cent of their education allocations to higher education. The public expenditure on higher education is low in some states partly due to the presence of private providers.

The dominant role of the government in financing higher education sector has come to an end and at present the expansion of the sector does not rely heavily on public funds. Some of the Committees appointed by the government in the 1990s (Punnayya Committee and Swaminathan Committee) noted that the fee levels in India are very low and they recommended cost recovery of 15 per cent initially and 25 per cent (Punnayya Committee) eventually. Many universities increased fees in the past decades — they introduced fees or enhanced the then existing levels of tuition fees.

The amount of fees to be levied in the universities and their equity implications have been an area of debate in India (Bhushan, 2010; Chattopadhyaya, 2007; Tilak, 2004).

The Rashtriya Uchchatar Shiksha Abhiyan (RUSA) programme initiated in 2013 is expected to change the dominant pattern of resource allocation followed for the Central government funds (Varghese, 2021). Through RUSA, the resource allocation pattern is expected to change, from a majority of central government funds being allocated to central universities and institutions of national importance to central funds being channelised to government or government aided State HEIs, through the State governments. In other words, RUSA funding aims to strategically balance the Centre-State allocations based on certain norms and dependent on performance. Based on the plans prepared by the State higher education institutions, resources under RUSA are provided to improve their infrastructural facilities and other academic institutional systems (MHRD, 2018).

The Government of India set up a Higher Education Financing Agency (HEFA) in 2017 to mobilise funds from the market for the centrally funded higher educational institutions. HEFA is a non-profit, Non-Banking Financing Company (NBFC) for mobilising extra-budgetary resources for building crucial infrastructure in the higher educational institutions. The central budget 2018-19 called for increased investments in research and related infrastructure in premier educational institutions. The launch of RISE (Revitalising Infrastructure and Systems in Education) with a total investment of Rs.1,000,000/ millions in next four years is a step in that direction. The funds mobilised through HEFA will be used to finance for quality infrastructure, research labs and other facilities in the centrally funded institutions such as IITs, NITs, IIITs and IISERs and central universities. The NEP 2020 envisages to set up a National Research Foundation (NRF) with funding from the federal government to promote research in higher education institutions India.

Several forms of cost recovery measures and student loans are becoming new strategies for financing higher education institutions in India (Panigrahi, 2019). Student loans are becoming very popular in India. The loans are relied on for studies within the country and also for study abroad programmes. In 2000-01 the total number of loans taken was 112 thousand and it increased to 2.59 million in 2013-14. The education loan amount increased from Rs. 1.03 billion to 7.03 billion in 2013-14 which was more than the total central allocation to higher and technical education (Rani, 2017). As of December 2020, the student loan amount in India increased to Rs. 84,965 and the amount of student loans exceeds the budgetary allocations for higher education by the central government (Varghese, 2021).

India has developed a new portal --- Vidya Lakshmi --- jointly by the Ministry of Finance, Department of Higher Education in the Ministry of Education (MOE) and Indian Banks Association (IBA). The students seeking education loans in India can avail of applications and apply for education loans. They can also track the status of loan applications to banks anytime. The student loan scheme provides loans up to Rs. 7.5 lakh for studies in India and up to Rs. 15 lakhs for studies abroad. The loans are to be repaid over a period of 5 to 7 years with provision of grace period of one year after completion of studies.

The student loan facilities are relied on mostly by students pursuing engineering studies. India faces a high degree of loan default and the share of defaults in loan repayment is the highest among nursing and engineering students. While unemployment is the reason for non-repayment of loans among engineering graduates, non-traceability due to cross border migration for employment has also become a major reason for non-repayment in case of nursing graduates (Varghese, 2021). Despite the difficulties in recovery, student loans continue to remain a reliable alternative to public funding to pursue higher learning. This is more so because of the increase in the share of enrolments in the private higher education institutions where the fee levels are relatively high. Internationalisation of higher education in India, especially the outward cross-border mobility has also been affected by market processes and economic rationality. We now turn to this in detail in the next section.

#### Internationalisation of Higher Education in India

Higher education in India has greatly benefited from international collaborations. The first three universities established during the colonial period were modeled after the London University. Several missionary institutions of higher education were functioning in India during the colonial period. These collaborations continued even after independence when international cooperation and collaborations were relied on for the establishment of top ranking technical and professional institutions in India, especially the Indian Institutes of Technology and Management (IITs and IIMs), development of laboratory facilities for science research and training of higher education teachers. The first-generation professors in many of India's higher education institutions were either of foreign origin or trained abroad. Even today a good share of professors in most of the top-ranking higher education institutions in India are trained abroad (Varghese, 2020).

India is a beneficiary of the scholarship programs extended by USAID and the Fulbright Programme, Colombo Plan, British Council and Commonwealth scholarship

programmes, and the German Academic Exchange Service (DAAD). India is a major student sending country and sends more than 0.3 million students abroad for studies (Varghese, 2020). The USA, UK and Australia are favourite destinations for Indian students. Indian students form the second largest group after China among the cross-border students and among those enrolled in MOOCs programmes after the USA.

The number of students studying abroad increased from around 2 million in 2000 to 5.4 million in 2017 (the year for which latest data are available) and the figure is expected to grow to 8 million by 2025 (UNESCO, 2022). India is the second largest sending country after China. Indian students are mostly hosted by USA, UK, Australia and Canada. A large number of Indian students go to East European countries and China to study medicine.

The flow of cross border students to India is low. In 2017-18 India hosted around 47,000 foreign students. Most of them came from South Asian countries led by Nepal and African countries. An overwhelming majority of the foreign students in India came for under-graduate studies mostly in technology (B Tech), commerce (B Com) and medical sciences. India envisages to enrol 500,000 international students in Indian institutions by the year 2024. The government is also planning to expand student scholarships to 50,000 by the year 2024.

The institutional mobility is not yet permitted, yet India has more of institutional collaborations than operation of branch cam. According to the Association of Indian universities survey (AIU, 2012) nearly 631 foreign institutions, mostly from UK, Canada and USA were collaborating with Indian universities. The NEP 2020 plans to permit opening of branch campuses by foreign institutions in India. Indian institutions have been establishing branch campuses abroad. Several Indian private institutions have established campuses in Mauritius, Dubai, Malaysia, Singapore and in other countries. A recent survey (Mathews, 2021: 28) among the 200 top ranked universities in the world showed that some of them are interested to establish their branch campuses in India.

A programme called Global Initiative for Academic Network (GIAN) was launched in 2017-18 to attract foreign faculty members to teach for short durations in Indian universities. It attracted around 1800 scholars from 56 countries to offer courses in 2017-18 and 2018-19. In its next phase in GIAN II the government intends to promote mobility of Indian faculty members to teach in universities abroad. Another Scheme for Promotion of Academic Research and Collaboration (SPARC) was launched in 2018 to promote research collaboration between reputed institutions abroad and Indian institutions. The new initiatives including the recommendations in the NEP 2020 opens

a new avenue for international collaborations in research and cross border mobility of institutions, programmes, students and teachers.

## NEP 2020 and Future of Higher Education Development in India

More than three decades after the education policy of 1986, India announced a new policy, NEP 2020 (MHRD, 2020), which will guide education development in the country over the next decades. The NEP 2020 envisages to universalise higher education, facilitate institutional consolidation and encourage flexible pathways to higher learning to take advantage of the technological developments and introduce new governance structures. The major focus is on improving quality of higher education, improve learning outcomes to enhance India's standing and role in the global education landscape.

#### From Massification to Universalisation

The National Education Policy 2020 (MHRD, 2020) provides a long-term perspective, and it recognises the importance of public policy and funding on the one hand and the role of market in the provision of education and employment on the other. Unlike the previous policies of 1968 and 1986, the NEP 2020 makes a welcome recommendation for an expansion of the higher education sector and its eventual universalisation by 2035. It implies almost a doubling of the GER from the current level of 26.3 per cent to 50 per cent within the next 15 years. It is estimated that in order to achieve the enrolment target of 50 per cent GER by 2035, the GER in higher education is required to grow at an annual average growth rate of 3.9 per cent between 2019 and 2035 (Table 15). Consequently, it is estimated that if we go by the projected annual average growth rate of the GER, the total enrolment in higher education will be required to increase from 38.5 million in 2019-20 to 71.1 million in 2035. However, when we go by the state level changes in enrolment it works out to be 73.0 million as indicated in Table 15.

Further, the capacity to expand and move from a stage of massification to universalisation varies across states in India. Table 15 shows four types of emerging patterns of progress from massification to universalisation of HE in India, and accordingly will require varying levels of effort to meet the GER target of 50 per cent by 2035. First, states with mature HE system which have already universalised and achieved the target 50 per cent GER in 2019-20; second, states with HE systems which are on track to achieve or surpass the GER target 50 per cent by 2035 with their natural GER growth rate experienced during 2014-2019 period; third states with expanding HE systems which will meet 50 per cent GER target by 2035 with moderate

additional efforts; and fourth states at lower levels of HE development and stagnating enrolments which may meet the target 50 per cent GER by 2035 with substantial efforts or may not meet the targets.

In the first category, Chandigarh and Tamil Nadu have already crossed 50 per cent mark and experienced universalisation of GER in 2019-20. Capacity to expand is at a much higher rate in the second category of states such as Andhra Pradesh, Kerala, Karnataka in the south, Maharashtra in the western part and Jammu & Kashmir, Himachal Pradesh and Uttarakhand in the North. If the GER in these states continues to grow at an annual average growth rate achieved between 2014 and 2019, these states will be able to achieve or surpass the target of 50 per cent GER by 2035. The third category of states which will meet 50 per cent target by 2035 with some additional efforts include Madhya Pradesh, Rajasthan, Orissa, Telangana and Tripura.

There are states that belong to the fourth category which are at a low level of HE development and experience low growth rates in enrolment. The states that fall in this category require substantial efforts for improving their HE capacities to expand at a higher rate of growth than their current (2014-2019) in order to reach target GER 50 per cent in 2035. It is estimated that the GER for higher education in Bihar will be required to grow at an annual average growth rate of 8 per cent per annum between 2019 and 2035 (Table 15) against a rate of growth of 0.8 per cent in enrolment experienced between 2014 and 2019. This translates into a doubling of annual enrolment intake to 2.66 lakhs to reach the target of 50 per cent in 2035. Thus, for Bihar, along with other states, such as Gujarat, Haryana, Uttar Pradesh, West Bengal the distance to travel to achieve universalisation of higher education by 2035 is remote and extremely challenging even with substantial efforts.

The transition rate from secondary to higher education level is high even in educationally backward states (Varghese et al., 2019) and therefore, unless secondary school education is sufficiently expanded in the educationally less developed states, the national goal of universalisation of higher education by 2035 may not be realized. In other words, to reach a GER target of 50 per cent at the national level, there needs to be increase in investment, both public and private, in all states except in those which have already reached the target or are close to the target. However, in case of states such as Bihar, Jharkhand, Uttar Pradesh, Odisha, Rajasthan, Madhya Pradesh and other educationally backward states, additional investment is needed both at the higher education level and at the school education level.

Table 15: GER and Enrolment Projections in Higher Education in India for 2035

States	GER: 2019- 20	Growth Rate of GER (2014- 2019)	GER Projection for 2035 @ GER growth rate of 2014-19	Projected Growth Rate for Target GER of 50 per cent by 2035	Total Enrolment (2019-20)	Enrolment projection for 2035 to meet target GER 50%	Additional intake projection (2019- 2035)
Chandigarh	52.1	-1.50%	T	CED	106667		
Sikkim	75.8	20.10%	Target 50% GER already achieved in 2019-20		58071	Target 50% GER already achieved in 2019-20	
Tamil Nadu	51.4	2.60%			3520311		
*Andhra Pradesh	35.2	2.40%	51.78	2.40%	1897149	2790893	55859
*Arunachal Pradesh	35.4	4.60%	72.46	4.60%	55816	114249	3652
***Assam	17.3	3.20%	28.51	6.90%	650601	1880350	76859
***Bihar	14.5	0.80%	16.6	8.00%	1738432	5994593	266010
**Chhattisgarh	18.5	4.80%	39.46	6.40%	586395	1584851	62404
***Dadra & Nagar Haveli	9.4	2.50%	14	11.00%	6393	34005	1726
***Daman & Diu	6.1	1.40%	7.58	14.10%	3932	32230	1769
*Delhi	48	2.00%	65.77	0.30%	1132856	1552319	26216
***Goa	28.4	0.50%	30.76	3.60%	52782	92926	2509
***Gujarat	21.3	1.30%	26.06	5.50%	1544840	3626385	130097
***Haryana	29.3	1.20%	35.48	3.40%	933541	1593073	41221
*Himachal Pradesh	40.8	5.50%	96.27	1.30%	289488	683044	24597
*Jammu & Kashmir	32.4	5.50%	76.22	2.70%	395416	930150	33421
*Jharkhand	20.9	6.30%	55.53	5.60%	817560	2172308	84672
*Karnataka	32	3.90%	59.22	2.80%	2187892	4049237	116334
*Kerala	38.8	6.20%	101.83	1.60%	1137853	2986246	115525
**Madhya Pradesh	24.2	4.30%	47.51	4.60%	2182154	4508583	145402
*Maharashtra	32.3	3.00%	51.61	2.80%	4265472	6815249	159361
**Manipur	38.3	1.30%	47.11	1.70%	124538	162582	2378
*Meghalaya	26.1	4.90%	56.53	4.10%	87541	189605	6379
**Mizoram	26.1	2.30%	37.53	4.10%	33236	63670	1902
***Nagaland	18.5	3.50%	31.92	6.40%	44561	120435	4742
**Orissa	21.7	4.20%	41.65	5.40%	994929	2292463	81096
**Puducherry	46.3	0.10%	47.27	0.50%	80124	86527	400
***Punjab	28.2	0.80%	32.03	3.60%	869463	1541601	42009
**Rajasthan	24.1	3.80%	43.77	4.70%	2206517	4577836	148207
**Telangana	35.6	-0.30%	34.05	2.10%	1389608	1951697	35131
**Tripura	20.2	3.80%	36.43	5.80%	86247	213483	7952
***Uttar Pradesh	25.3	0.20%	26.28	4.30%	6388214	12624929	389795
*Uttarakhand	41.5	4.10%	79.28		493279	942340	28066
***West Bengal	19.9	2.70%	30.58	5.90%	2160893	5429379	204280
All India	27.1	2.20%	38.42	3.90%	38536359	73036986	2035246

Source: MHRD (2015); MOE (2020)

Categorization of states meeting GER target of 50% by 2035 with varying levels of effort

<sup>\*\*\*</sup>States which may meet the target 50 per cent GER by 2035 with substantial efforts



<sup>\*</sup>States which will meet 50 per cent GER target by 2035 with their natural GER growth rate

<sup>\*\*</sup>States which will meet 50 per cent GER target by 2035 with some additional efforts

#### **Institutional Consolidation**

The NEP 2020 considers transforming existing institutions into multi-disciplinary institutions --- Research University, Teaching University and Multidisciplinary Autonomous Colleges --- to develop world class Multidisciplinary Education and Research University (MERU). It will also put an end to the system of affiliated colleges over a period of next 15 years.

The NEP 2020 promotes flexible pathways to higher learning. The system will promote 4 years or 3 years undergraduate degree programmes, one or two-year Master's programmes, credit transfer between universities, and between online courses and face-to-face courses. The flexibility of curricular choice shall be an important element of the restructuring of pedagogy. This will a move towards introducing flexible pathways to higher learning.

Another related recommendation of the NEP 2020 is to phase out small colleges and ensure a minimum of 3000/student enrolment in any college. As of 2019 nearly 6.5 per cent of the colleges have an enrolment of less than 500/students; nearly 92 per cent of the colleges have less than 2000/students and only 4 per cent of the colleges have more than 3000/ student enrolment (MHRD, 2019). There exist several small size colleges at least for two reasons. First, the government encouraged a policy of establishing higher education institutions in the rural areas to improve access, especially of girls. Second, there are many single disciple institutions and most of them are in the private sector. It may be easy to consolidate colleges under the same management in the urban areas. However, it will be more difficult to consolidate or merge institutions under different management. More importantly, such consolidation effort in the rural areas may lead to increasing inequalities in access to higher education.

#### New Accreditation Arrangements for Quality Enhancement

The NEP 2020 accords high priority for enhancing quality of higher education outcomes. As noted in earlier paragraphs, Indian universities do not appear in the top positions in the global ranking. The quality assurance efforts also have not succeeded to accredit a majority of institutions. The NEP 2020 considers setting up of a meta-accreditation agency called the National Accreditation Council (NAC). The NAC attempts to create a set of accreditors at the regional level. The NAC will accredit the accreditors (the decentralised or regional accreditation agencies) to create a pool or an ecosystem of accreditors. These decentralised efforts for provision of accreditation facilities may increase the number of institutions accredited in the future years.

#### **New Governance of Higher Education**

The NEP makes a separation of functions of standard setting, funding, accreditation and regulation by allocating these functions to separate agencies. The policy proposes transforming the governance system by setting up a single regulator as Higher Education Commission of India (HECI) with four verticals: for regulation (NHERC), accreditation (NAC), higher education grants council (HEGC) for funding and General Education Council (GEC) for academic standard. The standard setting functions will be performed by the professional standard setting bodies (PSSBs) under the GEC.

The idea of creating a single regulator is to facilitate 'light but tight' regulation by mitigating the problems of over-regulation in higher education. All the professional bodies, except medical and law stream of education will be under the HECI. The private and public sector institutions of higher education will have the same set of regulations.

NEP 2020 envisions university as an autonomous structure with an empowered structure of governance at the institutional level. The idea of institutional autonomy within the framework of graded autonomy is one of the governance reforms recommended. The policy proposes an empowered structure of Board of Governors for each higher education institution. In other words, the future growth of the sector will rely less on public authorities and state controls. However, the policy is less pronounced when it comes to the issue of funding of education. NEP 2020 does not provide any new promises other than reiteration of the recommendations of earlier education policies of 1968 and 1986.

## **Concluding Observations**

The analysis shows that higher education in India has been expanding at an accelerated rate in the recent decades. While expansion of the sector till the 1980s depended largely on the fiscal capacity of the state, the expansion in the present context does not rely heavily on state funding. The market influence has accelerated the growth of higher education institutions and student enrolment. In other words, unlike in the developed countries where massification was facilitated through public institutions, India has experienced a market mediated process of massification. This shift in the policy from public funded to private/household financed higher education has implications for affordability, equity and inclusion. Unless equity policies are in place and are effectively implemented, this model of development may have implications for creating an egalitarian society within a democratic framework.

The NEP 2020 indicates that the pressure to expand the sector will continue to reach a stage of universalisation. India's demographic dividend and the success of EFA programmes may help the efforts to universalise higher education. However, given the past experience, the question of quality will remain a major challenge in Indian higher education. A new trend is that household demand is for quality higher education. Unless quality is guaranteed, households are not willing to invest their resources. For example, many private higher education institutions have been closed in the recent past for lack of adequate demand and student enrolment. It can be argued that unless quality initiatives are not effectively implemented the expansion of the sector is uncertain.

The NEP 2020 does not give scope for increased public funding for higher education. It reiterates the commitment made in earlier polices of allocating 6 per cent of the GDP and 20 per cent of the public expenditure to education. Even if these financing targets are met, they will remain grossly inadequate for the expansion requirements of the sector. More than two-thirds of the students and 75 per cent of the institutions of higher education are in the private sector. Therefore, regulations on the market process to ensuring equity and quality becomes important step in the development of higher education in India. Further, the limited public funding needs to be better targeted for equity programmes and quality enhancement measures. In other words, increasing public allocations and better targeting the allocations as per the national priorities become necessary conditions for an equitable and balanced development of higher education in India.

A deepening of inequalities, slowing down of economic growth, increasing populism centred politics and the devastating effects of the pandemic have derailed many gains made by the sector across globe in the past decades. It is argued that the future of higher education will centre around the core idea of democratising knowledge production and its use. The role of higher education in producing and transacting knowledge, in legitimising knowledge, in shaping values and in educating future professionals and leaders need to be recognised to reimagine higher education for a better future (UNESCO, 2021). According to the World Higher Education Conference 2022, the future of higher education in 2050 will be flexible pathways to learning and multiple routes to access at affordable cost or no cost, with technology-enabled learning hubs accessible to all, ecologically sustainable higher education and development-driven higher education which is equitable and inclusive. The transformation in higher education requires not only investments in infrastructure, teaching and research but also on social imagination to shape the future of society

(UNESCO, 2022). Higher education of the future needs to become a global public good to advance the priority concerns underlined in the Sustainable Development Goals (SDGs) through promoting healthy collaborations and partnerships among social groups, institutions and countries across the world.

India, like many other countries, is recovering from the covid inflicted paralysing effects of learning losses and widening inequalities in access to and success in higher education. The global experience during the pandemic has shown that transition from face-to-face to online mode was not easy in many developing countries because of the existing digital divide. The covid period also showed that higher education systems relying on public funding have been less vulnerable to vagaries of the pandemic. Therefore, there is need to increase public funding to improve the IT infrastructure and target the public resources to the benefit of the more vulnerable sections. It is time to acknowledge and accept higher education as a moral right and it is right to evolve public policy support to extend it as an experience that every eligible person (defined in terms of capacity) should have. This should be the guiding principle to create enabling conditions for pursuing higher learning in the future. Such an approach may help move towards an inclusive universalisation of higher education in India.

#### References

- Agarwal, P. (2007): Private Higher Education in India: Status and Prospects. London: Observatory of Borderless Higher Education (OBHE).
- Agarwal, P. (2009): Indian Higher Education Envisioning the Future. New Delhi: Sage.
- Anandakrishnan, A. (2010): "Accountability and Transparency in University Governance," *University* News, 48(45), pp. 18-23.
- Association of Indian Universities (AIU) (2012): Foreign Educational Providers in India 2010. New Delhi: AIU.
- Ayyar, R.V.V. (2013): "Unfashionable Thoughts: An Ex-Policymaker's Perspective on Regulation in Education", Paper presented at the Workshop on Education Policy. Hyderabad: TISS.
- Bhushan, S. (2010): Public Financing and Deregulated Fees in Indian Higher Education. New Delhi: Bookwell.
- Borooah, V.K. and N.S. Sabharwal (2017): "English as a Medium of Instruction in Indian Education: Inequality of Access to Educational Opportunities", CPRHE Research Papers 10, Centre for Policy Research in Higher Education. New Delhi: National Institute of Educational Planning and Administration.
- Carnoy, M. and R. Dossani (2011): "The Changing Governance of Higher Education in India", Working Paper. Stanford University.
- Chanana, K. (2012): "Higher Education and Gender Issues in Knowledge Economy: Who Studies What, Why and Where", in D. Neubauer (ed.), The Emergent Knowledge Society and Future of Higher Education: Asian Perspectives. Oxfordshire: Routledge, pp. 177-93.

- Chattopadhyay, S. (2007): "Exploring Alternative Sources of Financing Higher", Economic & Political Weekly, 42(42), pp. 4251-4259.
- Clarke, B. (1998): Creating Entrepreneurial Universities. Paris and Oxford: IAU and Elsevier Science.
- Global University Network for Innovation (GUNI) (2022): New Visions of Higher Education Towards 2030 (Higher education in the World Report no.8). Barcelona: GUNI.
- Government of India (GOI) (2000): Report on a Policy Framework for Reforms in Education. New Delhi: Prime Minister's Council on Trade and Industry.
- Gupta, A. (2008): "Judicial Interventions and Private Higher Education in India", in A. Gupta, D.C. Levy and K.B. Powar (eds.), Private Higher Education Global Trends and Indian Perspectives. New Delhi: Shipra Publications, pp. 239-252.
- Henley, A. (2021): "The Rise of Self-Employment in the UK: Entrepreneurial Transmission or Declining Job Quality?", Cambridge Journal of Economics, 45(3), pp. 457-486.
- Henry, O. and M. Ferry (2017): "When Cracking the JEE is not Enough", South Asia Multidisciplinary Academic Journal, 15, pp. 1–28.
- Kumar, K. and L. Gupta (2008): "What Is Missing in Girls' Empowerment?", Economic & Political Weekly, 43(26/27), pp. 19-24.
- Levine, A. and J. C. Sun (2002): Barriers to Distance Education. Washington D.C: American Council on Education Center for Policy Analysis.
- Malik, G. (2020): "Governance and Autonomy: A Study of Central and State Universities", in N.V. Varghese and M. Garima (eds.), India Higher Education Report: Governance and Management of Higher Education in India. New Delhi: Sage, pp. 152-173.
- Malish C.M. and N.S. Sabharwal (2021): "Higher Education Success and Social Mobility: A Study of the UGC Coaching Schemes", CPRHE Research Report. New Delhi: CPRHE/NIEPA.
- Marginson, S. (2009): Hong Kong Higher Education Review (HER) External Expert Report. Melbourne: Centre for study of higher education, Melbourne University, pp. 26-31.
- Marginson, S. (2011): "Higher Education and Public Good", Higher Education Quarterly, 65(4), pp. 411-433.
- Mathews, E. (2021): "Establishing International Branch Campuses in India: A Survey among 'Top 200' Universities". New Delhi: National Institute of Educational Planning and Administration, pp. 28.
- Ministry of Education (MOE) (2020): All India Survey of Higher Education 2019–20. New Delhi: Ministry of Education, Government of India.
- Ministry of Human Resource Development (MHRD) (2005): All India Survey of Higher Education. New Delhi: Department of Higher Education, MHRD.
- Ministry of Human Resource Development (MHRD) (2015): All India Survey of Higher Education 2013-14. New Delhi: Department of Higher Education, MHRD.
- Ministry of Human Resource Development (MHRD) (2018): RUSA 2.0 Guidelines. New Delhi: Department of Higher Education, MHRD.
- Ministry of Human Resource Development (MHRD) (2019): All India Survey of Higher Education: 2018-19. New Delhi: Department of Higher Education, MHRD.
- Ministry of Human Resource Development (MHRD) (2020): National Education Policy (NEP 2020). New Delhi: MHRD.
- Musgrave, R.A. (1959): The Theory of Public Finance: A Study in Public Economy. New York: McGraw-Hill.
- National Sample Survey Organisation (NSSO) (2007): India Participation and Expenditure in Education, 2007-08, 64<sup>th</sup> round. New Delhi: Ministry of Statistics and Programme Implementation, Government of India.
- National Sample Survey Organisation (NSSO) (2014): *India: Social Consumption-Education Survey 2014,* 71<sup>st</sup> round. New Delhi: Ministry of Statistics and Programme Implementation, Government of India.

- National Statistical Office (NSO) (2017): India: Household Social Consumption on Education 2017-2018, 75<sup>th</sup> round. New Delhi: Ministry of Statistics and Programme Implementation, Government of India.
- Ostlingt, J. (2018): Humboldt and the Modern German University: An Intellectual History. Lund: Lund University Press.
- Panigrahi, J. (2019): "Institutional Strategies to Overcome Declining Public Funding in Higher Education", in N.V. Varghese and J. Panigrahi (eds.), India Higher Education Report 2018: Financing of Higher Education. New Delhi: Sage, pp. 139-164.
- Periodic Labour Force Survey (PLFS) (2020): Periodic Labour Force Survey, July 2019–June 2020. New Delhi: Ministry of Statistics and Programme Implementation, Government of India.
- Peterson, P.McGill (2019): "Public Trust and the Public Good", International Higher Education, (100), pp. 19-20.
- Rani, G. (2017): "Financing Higher Education and Education Loans in India: Trends and troubles", *Journal of Social Sciences*, 12(4), pp. 182-200.
- Sabharwal, N.S. and C.M. Malish (2018): "Student Diversity and Social Inclusion: An Empirical Analysis of Higher Education Institutions in India", CPRHE Research Papers 10, Centre for Policy Research in Higher Education. New Delhi: National Institute of Educational Planning and Administration.
- Sabharwal, N.S., S.K. Thorat, T. Balasubramanyam and D. Diwakar (2014): "Diversity, Academic Performance, and Discrimination: A Case Study of a Higher Educational Institution", IIDS Working Paper, 8(4). New Delhi: Indian Institute of Dalit Studies.
- Shavit, Y. R. Arum and A. Gamoran (2007): Stratification in Higher Education: A Comparative: Study. Stanford: Stanford University Press.
- Singh, A. (2004): Fifty Years of Higher Education in India: The Tole of The University Grants Commission. New Delhi: Sage.
- Sivasankaran, C.J. and P.K. Ravindran (2004): An Investigation in to the Problem of Wastage in the Engineering Colleges in Kerala. Evaluation. Report Submitted to Kerala Research Programme on Local Development, Centre for Development Studies, Thiruvanathapuram, Kerala.
- Sudarshan, R.M. (2018): "Higher Education and Gendered Norms: Enabling the 'Use' of Women's Education", in N. V. Varghese, N.S. Sabharwal and C. M. Malish (eds.), *India Higher Education Report* 2016: Equity. New Delhi: SAGE and NIEPA, pp. 221-242.
- The British Council (2014): Understanding India: The Future of Higher Education and Opportunities for International Cooperation. London: British Council.
- Tilak, J.B.G. (2004): "Public Subsidies in Education in India", Economic & Political Weekly, 39(4), pp. 343-359.
- Tilak, J.B.G. (1994): "The Pests are Here to Stay: Capitation Fee in Disguise", Economic & Political Weekly, 29(7), pp. 348-359.
- Trow, M. (2006): "Reflections on the Transition from Elite to Mass to Universal Access: Forms and Phases of Higher Education in Modern Societies Since WWII", in J. Forest and P. Altbach (eds.), International Handbook of Higher Education. Dodrecht: Springer.
- United National Educational Scientific and Cultural Organization (UNESCO) (2022): Beyond Limits: New Ways to Reinvent Higher Education (Working document for the World Higher Education Conference 18-20 May). Barcelona: UNESCO.
- United National Educational Scientific and Cultural Organization (UNESCO) (2021): Reimagining our Futures Together: A new social contract for education. Paris: UNESCO.
- University Grants Commission (UGC) (2003): Establishment of and Maintenance of Standards in Private Universities Regulations 2003. New Delhi: UGC.



- Varghese N.V., J. Panigrahi and A. Rohatgi (2018): "Concentration of Higher Education Institutions in India: A Regional Analysis", CPRHE Research Paper 11, Centre for Policy Research in Higher Education. New Delhi: National Institute of Educational Planning and Administration.
- Varghese, N.V. (2013): "Private Higher Education: The Global Surge and Indian Concerns", in *India Infrastructure Report 2012: Private Sector in Education.* London and New Delhi: Routledge Taylor and Francis Group (IDFC), pp. 145-156.
- Varghese, N.V. (2015): "Challenges of Massification of Higher Education in India", CPRHE Research Papers 1, Centre for Policy Research in Higher Education. New Delhi: National University of Educational Planning and Administration.
- Varghese, N.V. (2019): "Education and Economic Inequalities: What Indian Evidence Tells Us", Journal of Educational Planning and Administration, 33(3), pp. 175-192.
- Varghese, N.V. (2020): "Internationalization and Cross Border Mobility in Higher Education", International Journal of African Higher Education, 7(2), pp. 23-39.
- Varghese, N.V. (2021): "Strategies for Financing of Higher Education in India" Artika Charche (Fiscal Policy Institute Journal of Economics and Governance), 6(1), pp. 5-18.
- Varghese, N.V., N.S. Sabharwal and C.M. Malish (2019): "Equity and Inclusion in Higher Education in India", CPRHE Research Paper 12, Centre for Policy Research in Higher Education. New Delhi: National Institute of Educational Planning and Administration.
- Weller, M. (2009): "Using Learning Environments as A Metaphor for Educational Change", On the Horizon, 17(3), pp. 181-189.

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# About the paper

The higher education sector in India has expanded at an accelerated pace in recent decades. It has transformed from a slow-growing, low-enrolment sector to a fast-growing, massified sector with diversification of institutions, study programmes, funding sources and student body. The National Education Policy of 2020 (NEP, 2020) targets further accelerated growth of the sector to reach a stage of universalisation by 2035. The trend in the nature of higher education development has been such that it has moved away from its initial framework of public funding and state control to market-friendly reforms and non-state funding. This paper discusses the challenges of managing quality and equity in a market-mediated massifying system. It indicates that the future of higher education development will lie in regulating market processes to ensure equity and quality, better targeting for equity programmes and quality enhancement measures, adopting flexible pathways for higher learning, and aligning the teaching learning process with technological developments.

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